

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES**

In re application of: Daniel ManHung Wong, et al. Confirmation No.: 3803

Serial No.: 10/786,941) Examiner: Michael Pham
Filed on: February 24, 2004)) Group Art Unit No.: 2167
))

For: SENDING CONTROL INFORMATION WITH DATABASE STATEMENT

Via EFS
Commissioner for Patents
Alexandria, VA 22313-1450

REPLY BRIEF

Sir or Madam:

This Reply Brief is submitted in response to the clearly erroneous arguments that are newly presented in the Examiner's Answer mailed March 31, 2011.

I. REAL PARTY IN INTEREST

Oracle International Corporation is the real party in interest.

II. RELATED APPEALS AND INTERFERENCES

The Appellant has no further comment on the related appeals and interferences presented in the Appeal Brief filed Dec. 30, 2010.

III. STATUS OF CLAIMS

Pending Claims 1-26 have been finally rejected and are the subjects of this appeal.

IV. STATUS OF AMENDMENTS

The Appellant has no further comment on the status of amendments presented in the Appeal Brief filed Dec. 30, 2010.

V. SUMMARY OF CLAIMED SUBJECT MATTER

The Appellant has no further comment on the summary of claimed subject matter presented in the Appeal Brief filed Dec. 30, 2010.

VI. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

The Office is thanked for acknowledging that Claims 1-26 satisfy 35 U.S.C. § 112, first and second paragraphs.

The remaining grounds of rejection to be reviewed on appeal are:

B. Claims 1-4, 6-9, 14-21, and 26; 35 U.S.C. § 102(e) – *Puz*: Claims 1-4, 6-9, and 14-21 were rejected under 35 U.S.C. 35 U.S.C. § 102(e) as allegedly anticipated by U.S. Patent Application Publication No. 2003/0140311 (*Puz*).

C. Claims 5, 10-13, and 22-25; 35 U.S.C. § 103(a) – *Puz* and *Fujiwara*: Claims 5, 10-13, and 22-25 were rejected under 35 U.S.C. 35 U.S.C. § 103(a) as allegedly unpatentable in view of U.S. Patent Application Publication No. 2003/0140311 (*Puz*) and further in view of U.S. Patent Application Publication No. 2003/0014394 (*Fujiwara*).

VII. ARGUMENTS

It is respectfully submitted that the Office committed clear error in rejecting Claims 1-4, 6-9, and 14-21 under 35 U.S.C. 35 U.S.C. § 102(e), and Claims 5, 10-13, and 22-25 under 35 U.S.C. 35 U.S.C. § 103(a). The arguments presented in the Appeal Brief filed on Dec. 30, 2010, explain the clearly erroneous nature of these rejections. The arguments herein are responsive to the clearly erroneous arguments that are newly presented in the Examiner’s Answer mailed March 31, 2011.

B. CLAIMS 1-4, 6-9, 14-21, AND 26; 35 U.S.C. § 102(e) – PUZ

Claims 1-4, 6-9, 14-21, and 26 were rejected under 35 U.S.C. § 102(e) as allegedly anticipated by *Puz*. This rejection was made in clear error.

i. Response to Examiner’s Answer

On page 19 of the Examiner’s Answer, the Office erroneously alleges that *Puz* shows a tag that is (a) included in a request to execute a database statement, and (b) not embedded in the database statement. Firstly, the Office cites Figure 2 of *Puz*, which involves (par. 29) parsing “an exemplary query 30 submitted by a user.” *Puz* explains that (par. 29) “client-side software 14 parses the query 30, converts it to a parse tree (not shown), and generates an SQL string.” After “an appropriate security marker is inserted into the SQL string,” the “SQL string is divided

into multiple query parts 34, 36, 38, each query part including an SQL part 40, 42, 44 and a respective security marker 46, 48, 50.” In other words, in *Puz*, the security marker is embedded in (i.e., “inserted into”, “part” of) the SQL string. As illustrated in Figure 2, the security markers are inside boxes 34, 36, and 38, which correspond to parts of the query. Therefore, the security markers in *Puz* are embedded in the database statement.

In particular, on page 19, the Office cites markers 46, 48, and 50 as tags that are allegedly not embedded in the database statement. However, as shown in Figure 2, markers 46, 48, and 50 are within query parts 34, 36, and 38. As explained in *Puz*, “the server-side software 12 receives the SQL query parts from the client system 18 as a single string.” Therefore, the security markers in Figure 2 are embedded in the database statement.

On page 20 of the Examiner’s Answer, the Office erroneously interprets “not embedded in said database statement,” as claimed, to mean “appended to, attached to, sent with, embedded in or otherwise associated with a database statement,” as mentioned in paragraph 22 of Appellant’s specification. In other words, the Office alleges that “not embedded in said database statement” could have the same meaning as “embedded in said database statement.” This argument is clearly erroneous on its face, as the Office is apparently ignoring the word “not” that precedes “embedded in said database statement.”

Appellant’s specification provides several examples of tags that are not embedded in the database statement (see the various paragraphs cited on page 4 of the Appeal Brief). In paragraphs 17 and 22, Appellant describes tags that are appended to, attached to, sent with, or otherwise associated with database statements. In a particular example provided in paragraphs 33 and 34, Appellant’s specification provides an example execution interface for passing a control tag in the same request as a database statement. As shown, the example interface is: “DBMS_SQLPARSE(cursor, statement, language flag, control tag).” In an example use of the

example execution interface, the control tag is “resource=g1 id=scott,” which includes two parameter fields, “resource” and “id,” with corresponding parameter values, “g1” and “scott.” The control tag is clearly not embedded in the database statement even though the control tag is sent in the same request as the database statement. Therefore, not only did the Office commit clear error by equating “not embedded in said database statement” with “embedded in said database statement,” but the Office also erroneously ignored various other embodiments described in the specification where the tag is “not embedded in said database statement.”

On page 20, the Office also appears to equate “inserted [into]” with “appended to.” As discussed, *Puz* (par. 29) mentions that “an appropriate security marker is inserted into the SQL string.” Appellant respectfully submits that “inserted into,” as mentioned in *Puz* is synonymous with “embedded in,” and does not mean “appended to” as alleged. Both the words “inserted” and “into” use “in” to describe a marker that is inside of, within, or embedded in the database statement. *Puz* does not show a tag that is not embedded in the database statement as claimed.

On page 20, the Office alleges that the security marker does not conform to a database language of said database statement “because it must be translated.” To be more precise, the SQL string with the security markers is not the string that is submitted to the database server for execution in *Puz*. *Puz* explains (par. 33) that a server-side CMS (content management system) processes the SQL string with the security markers such that “each security marker is replaced with respective SQL joins and conditions to form a final SQL string for submission to DBMS (84)” (i.e., a database management system). *Puz* continues (par. 34): “The final SQL string is submitted by the server-side CMS to the DBMS for execution of the final SQL query.” Therefore, the database statement actually submitted to the database server for execution in *Puz* is not submitted with (but not embedded in) a tag that does not conform to the database statement. Thus, whether or not the security marker in *Puz* conforms to the database language of

the database statement, the security marker is not submitted with (but not embedded in) the database statement for execution.

On page 21 of the Examiner's Answer, the Office erroneously characterizes Appellant's citation, on pages 4-5 of the Appeal Brief, of paragraph 22 of Appellant's specification as an "admission . . . of what not embedded means." The purpose of the Summary of Claimed Subject Matter (pages 4-5 of the Appeal Brief) is to allow the Board to more quickly determine where the claimed subject matter is described in the application (see MPEP 1205.02). Paragraph 22 was cited as one example portion of the specification that describes examples of tags that are not embedded in database statements. This example portion also describes an example of a tag that is embedded in a database statement. However, the claim clearly excludes this embodiment by stating "wherein the tag is not embedded in said database statement." The Office has erroneously characterized the claimed tag as being embedded in the database statement even though the claim expressly states that the tag is not embedded in the database statement. Therefore, the Office committed clear error by ignoring limitations that are expressly recited in the claim. Further, these ignored limitations are not in fact shown by the cited art.

On page 21 of the Examiner's Answer, the Office erroneously alleged that a security marker that does not exist shows a tag that is (a) included in a request to execute a database statement, and (b) not embedded in the database statement. A security marker that does not exist cannot be included in a request to execute a database statement. If the security marker existed, then the security marker would be embedded in the database statement as shown in Figure 2. Conversely, if the security marker is embedded in the database statement as shown in Figure 2, then the security marker cannot fairly be said to "not exist." The illustration of Figure 2 shows where the security marker would have served as a placeholder had the security marker existed, even though *Puz* describes an embodiment where the security marker does not exist. Therefore,

Puz does not show a tag that is (a) included in a request to execute a database statement, and (b) not embedded in the database statement.

On page 23 of the Examiner's Answer, the Office erroneously alleged that, during execution of the database statement, the database server in *Puz* provides access to one or more of the at least one parameter value through said tag access mechanism provided by said database server. In *Puz* (par. 34), the DBMS is responsible "for execution of the final SQL query," which does not include any security markers at all. Before the final SQL query is submitted to the DBMS, the security markers have been (par. 33) "replaced with respective SQL joins and conditions to form a final SQL string for submission to a DBMS (84)". Thus, in *Puz*, there are no tags submitted to the database server with the final SQL string; the database server does not have any access to any parameter values of any tags; and the database server does not have a tag access mechanism that provides access to any of the parameter values during execution of the database statement. *Puz* fails to show at least these additional features.

In particular, pages 24-25 of the Examiner's Answer erroneously cites the pre-execution query processing in *Puz* as occurring "during execution" of the database statement. During the pre-execution query processing, *Puz* mentions (par. 33) processing a query to replace placeholder security markers "with respective SQL joins and conditions to form a final SQL string for submission to a DBMS (84)." Then (par. 34), "the final SQL string is submitted by the server-side CMS to the DBMS for execution of the final SQL query." *Puz* clearly distinguishes between pre-execution query processing (par. 33) and execution by the DBMS (par. 34), and a person of ordinary skill in the art could not read *Puz* as teaching that a database server provides access to parameter values "during execution" of the database statement.

Also on pages 24-25 of the Examiner's Answer, the Office erroneously alleges that *Puz* replaces the security marker during execution of the database statement, not prior to execution of

the database statement, “because *Puz* discloses that the execution of the database statement occurs in figure 4 after element 72, where the query is entered into the system.” To be precise, element 72 describes the step where the “client system receives query from a user.” The markers are inserted by the client-side CMS in step 80, and removed from the server-side CMS in step 84. The final SQL string is not submitted to the DBMS for execution until step 86, which is after the markers have been removed from the SQL string (see also *Puz*, pars. 33-34).

ii. Conclusion

For at least these reasons, in addition to the reasons provided in the Appeal Brief, *Puz* does not show all of the features of Claims 1-4, 6-9, 14-21, and 26. Therefore, a rejection of Claims 1-4, 6-9, 14-21, and 26 cannot be sustained under 35 U.S.C. § 102(e). Appellant respectfully requests reversal of the rejection of Claims 1-4, 6-9, 14-21, and 26 under 35 U.S.C. § 102(e). Claims 1-4, 6-9, 14-21, and 26 have been extensively examined and are believed to be in condition for allowance.

C. CLAIMS 5, 10-13, AND 22-25; 35 U.S.C. § 103(a) – PUZ & FUJIWARA

Claims 5, 10-13, and 22-25 were rejected under 35 U.S.C. § 103(a) as allegedly unpatentable in view of *Puz* and further in view of *Fujiwara*. This rejection was made in clear error.

i. Response to Examiner’s Answer

On page 25 of the Examiner’s Answer, the Office erroneously alleges that it would have been obvious to a person of ordinary skill to combine *Puz* and *Fujiwara* because they are in the same field. The mere allegation that two references are in the same field does not lead to a

conclusion that it would have been obvious for a person of ordinary skill in the art to combine those two references to form the claimed embodiments. Further, this allegation does not address fundamental gaps that exist between the claimed embodiments and both of the cited references.

As clearly explained in the Appeal Brief, *Fujiwara* does not fill the fundamental gaps left by *Puz*. Both *Fujiwara* (pars. 73-74) and *Puz* (par. 33) rely on placeholders that are embedded in database statements. Relying on placeholders requires the placeholders to be embedded in database statements. Thus, neither reference, nor a combination of the two references, shows a tag that is not embedded in the database statement.

In both references, the database server receives a database statement after the placeholders have been replaced. The database servers in the art do not receive a tag or any other information other than the statement for execution. Therefore, the claimed database servers could not have possibly accessed any parameter values of the tag during execution of the database statement.

ii. Conclusion

For at least these reasons, in addition to the reasons provided in the Appeal Brief, this rejection lacks the rational underpinning, based in fact, that is required by law to sustain the rejection under 35 U.S.C. § 103(a). Therefore, the rejection of Claims 5, 10-13, and 22-25 cannot be sustained under 35 U.S.C. § 103(a). Appellant respectfully requests reversal of the rejection of Claims 5, 10-13, and 22-25 under 35 U.S.C. § 103(a). Claims 5, 10-13, and 22-25 have been extensively examined and are believed to be in condition for allowance.

D. CONCLUSION AND PRAYER FOR RELIEF

Based on the reasons provided in this Reply Brief and in the Appeal Brief filed on Dec. 30, 2010, it is respectfully submitted that the Office committed clear error in rejecting Claims 1-4, 6-9, and 14-21 under 35 U.S.C. 35 U.S.C. § 102(e), and Claims 5, 10-13, and 22-25 under 35 U.S.C. 35 U.S.C. § 103(a). Appellants therefore respectfully request that the Honorable Board reverse the rejection of Claims 1-4, 6-9, and 14-21 under 35 U.S.C. 35 U.S.C. § 102(e), and Claims 5, 10-13, and 22-25 under 35 U.S.C. 35 U.S.C. § 103(a). All pending claims have been extensively examined and are believed to be in condition for allowance.

Respectfully submitted,

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